

Evaluation of Maryland Youth Suicide (12-24 years), 2003-2004

Maryland Department of Health and Mental Hygiene
Center for Maternal and Child Health

AND

Johns Hopkins Bloomberg School of Public Health
Public Health Applications for Student Experience

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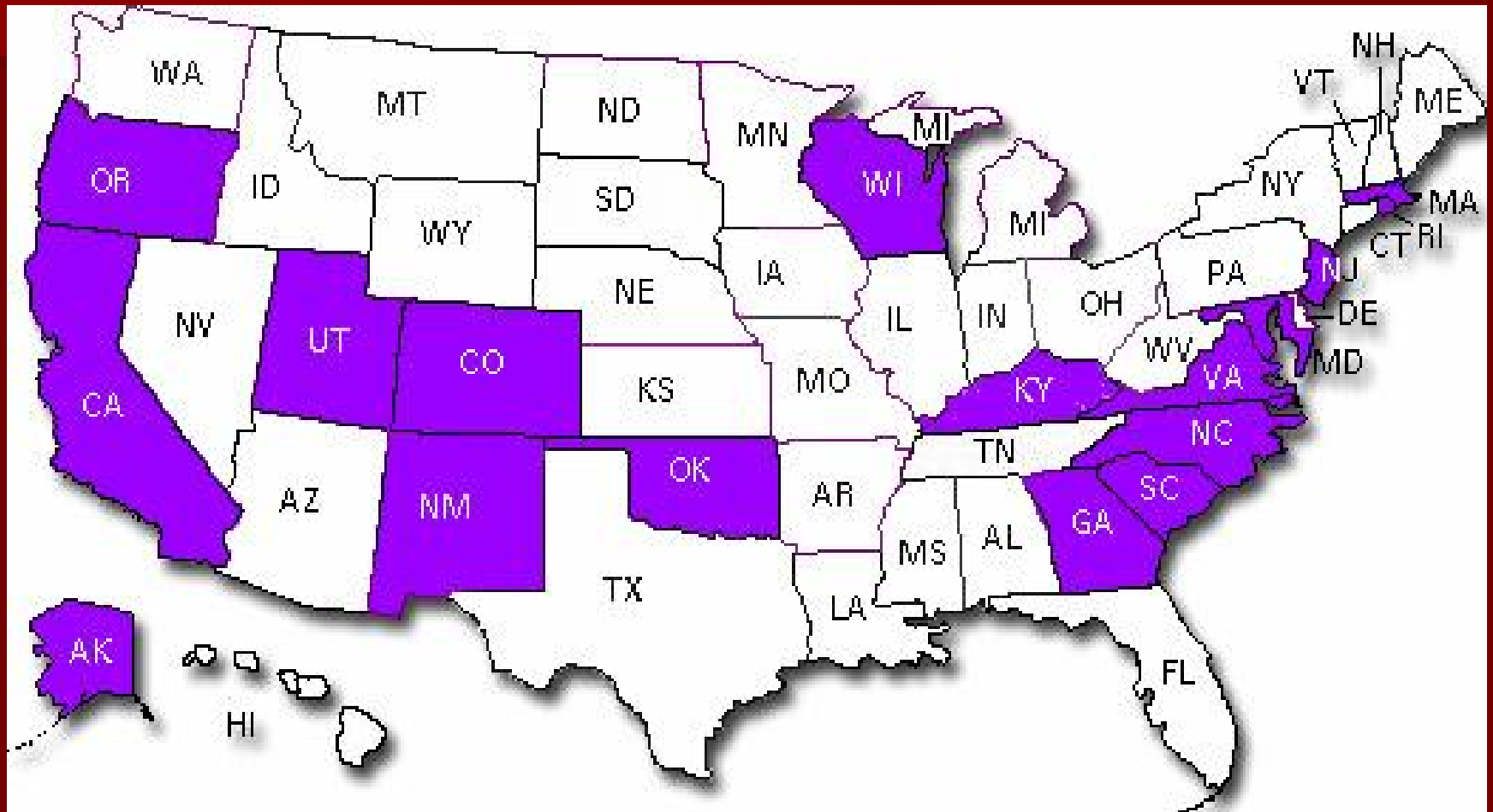
May 12, 2006

Public Health Problem

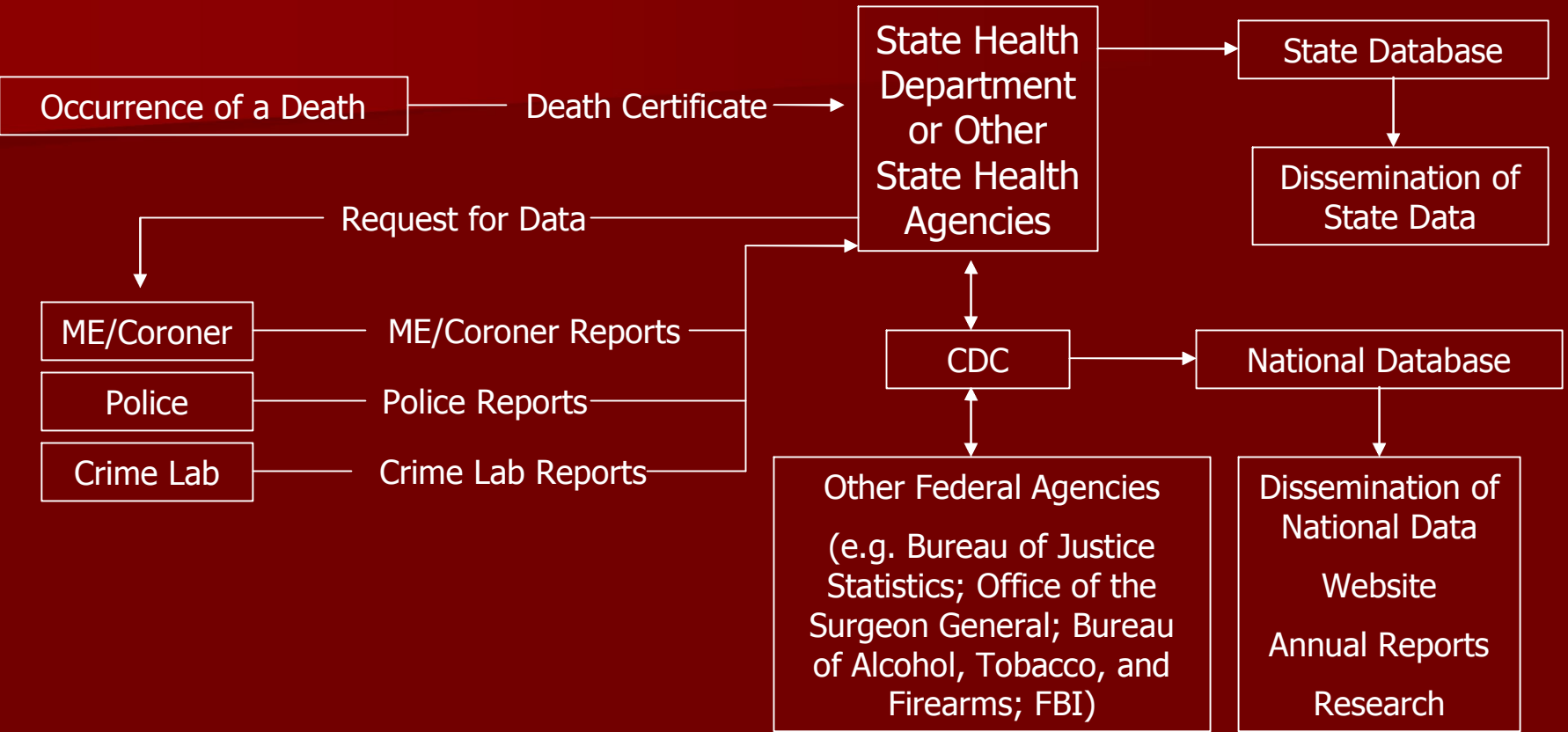
- Suicide is the third leading cause of death among adolescents and young adults ages 15-24 years.
- The overall rate of suicide among youth has declined slowly since 1992. However, rates remain unacceptably high.
- In Maryland, in 2003-2004, youth under 25 years accounted for 16.3% of the population and 21% of all suicides.
- Suicide is responsible for personal and economic loss to communities and societies worldwide. In addition, the conditions that result in suicide or suicide attempts reduce one's quality of life.
- Suicide is generally a complication of a psychiatric disorder, but this disorder is often not the lone cause and it may result from additional risk factors.
- The three leading risk factor categories for adolescent suicide include mood disorders, substance abuse problems, and behavior disorders



NVDRS: 17 Participating States



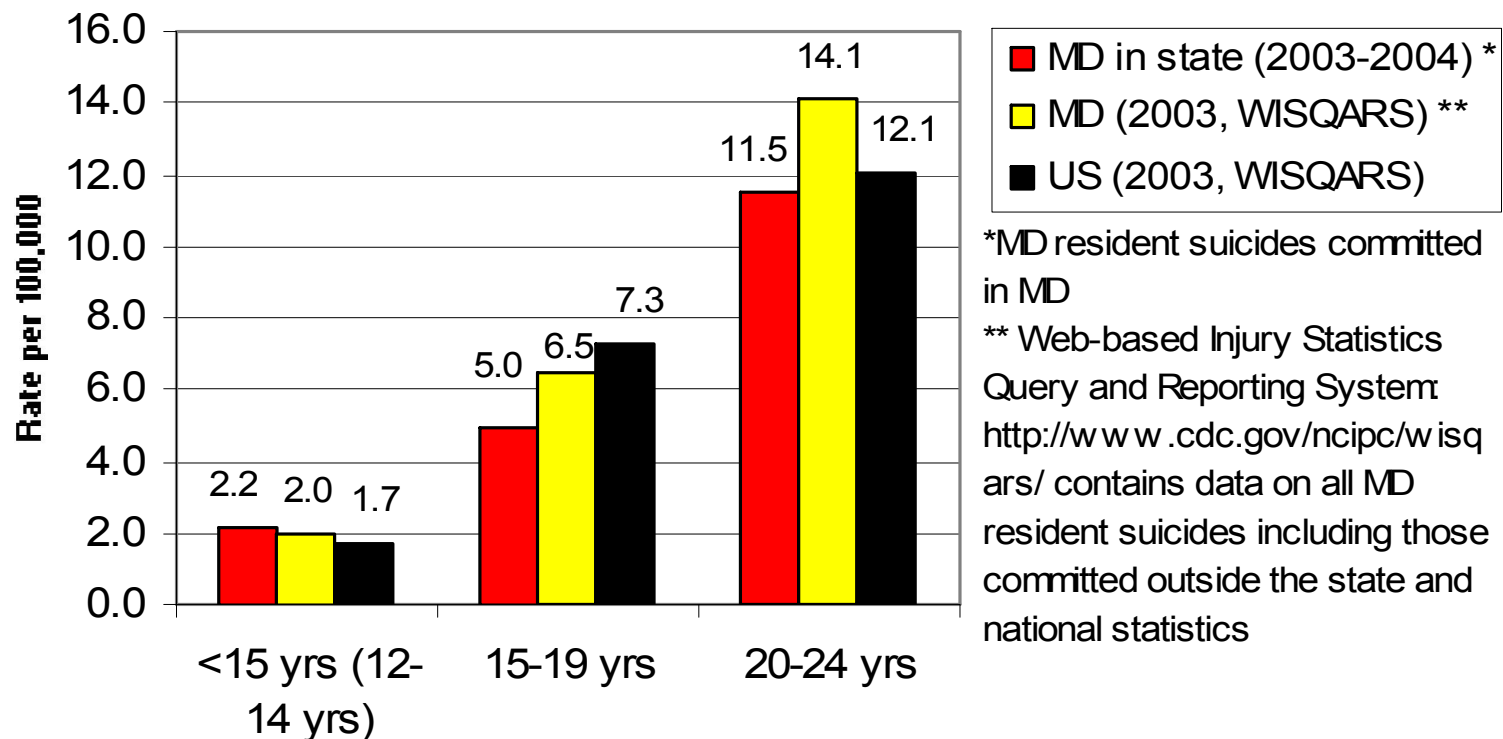
NVDRS: How it Works



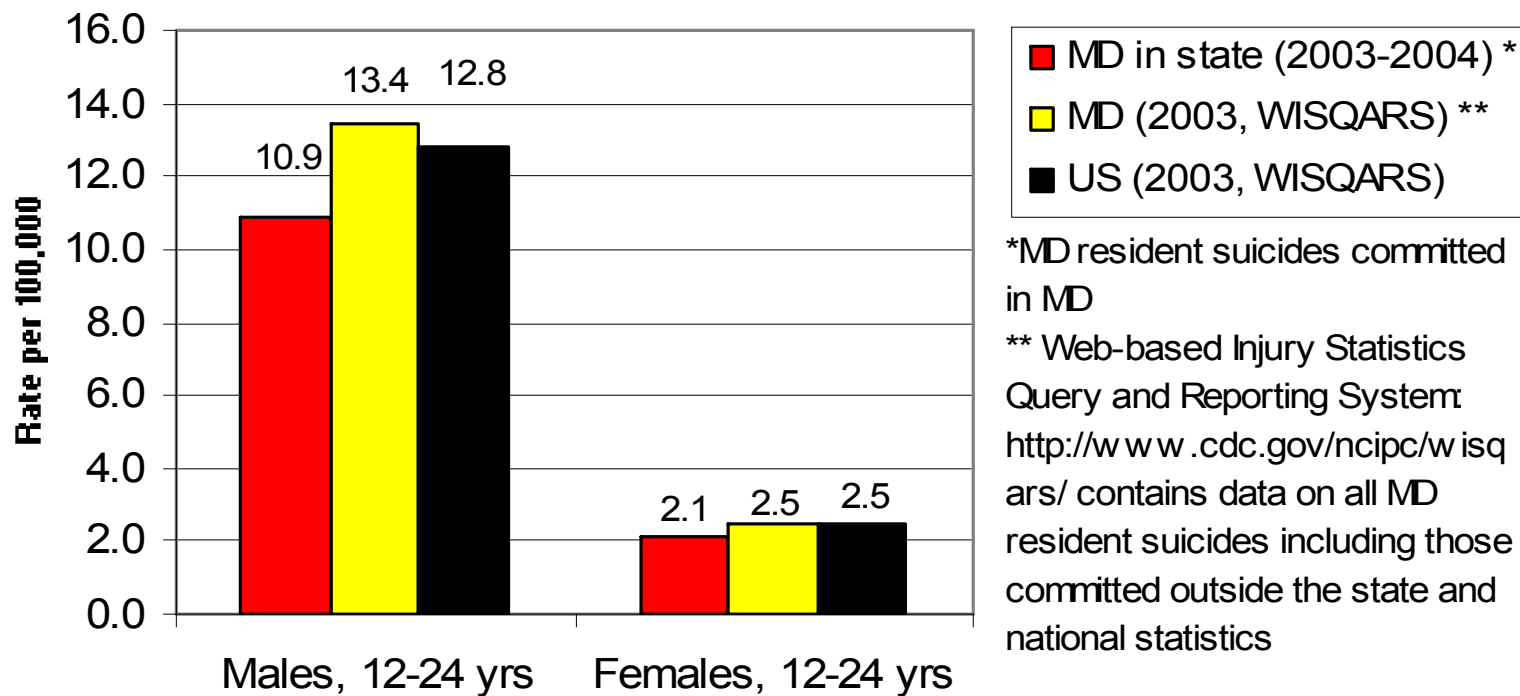
Demographics (N=133)

| | % |
|------------------|------|
| Gender | |
| Male | 84.2 |
| Female | 15.8 |
| Age | |
| 12-19 | 37.6 |
| 20-24 | 62.4 |
| Race | |
| African American | 24.8 |
| Asian | 3.0 |
| White | 70.7 |
| Other Race | 1.5 |
| County | |
| Urban | 74.4 |
| Rural | 25.6 |

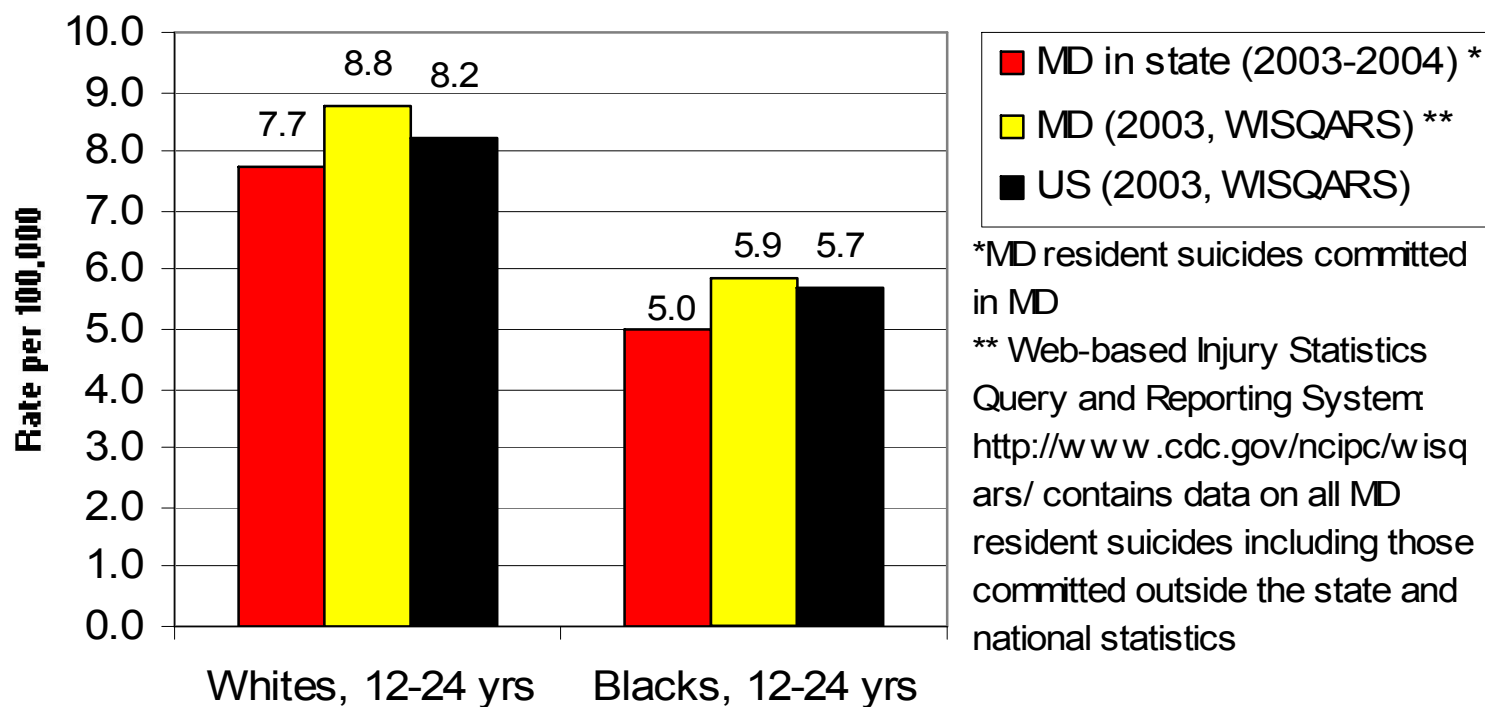
Suicide by Age: Comparison to National Statistics



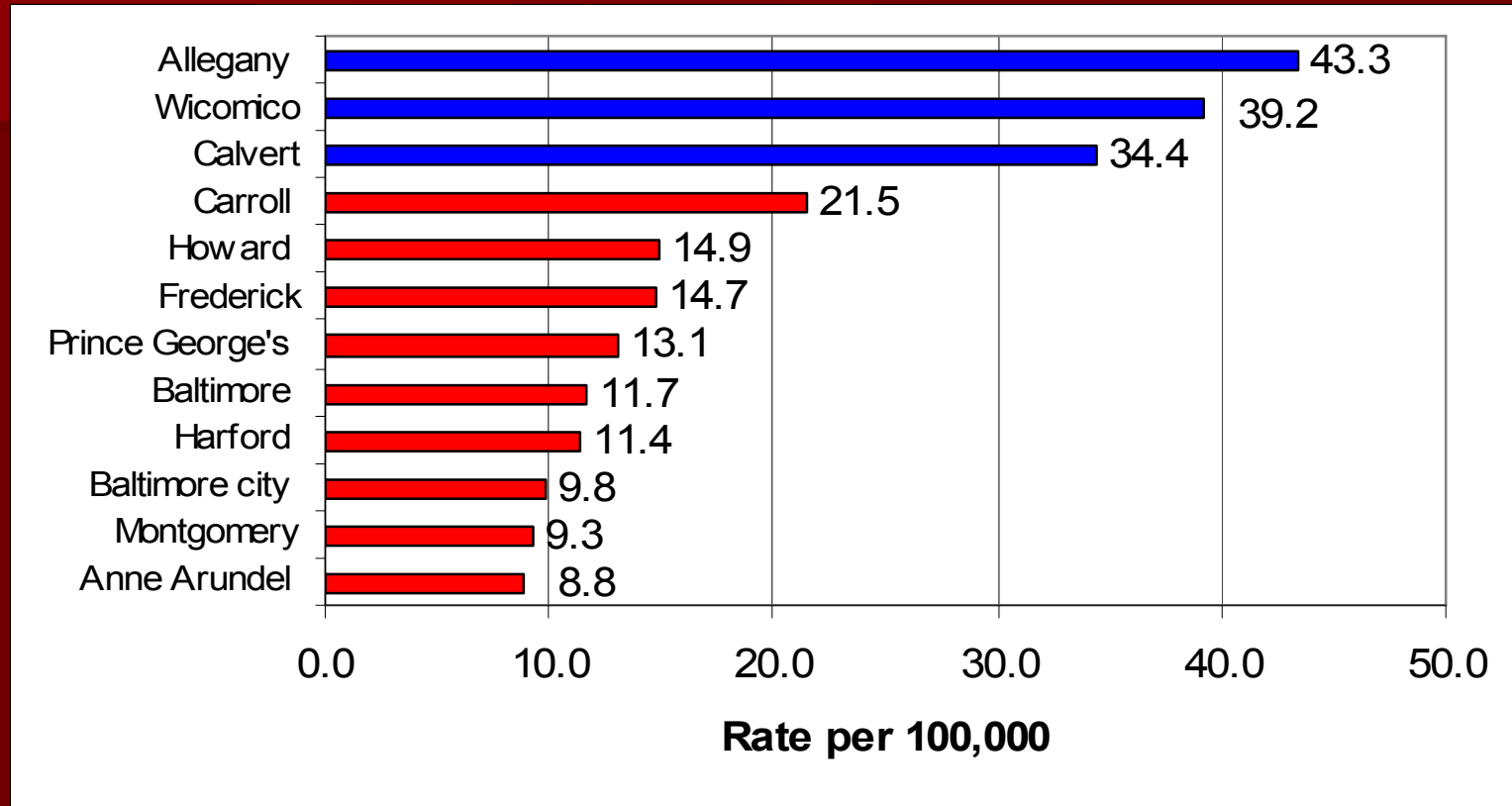
Suicide by Gender: Comparison to National Statistics



Suicide by Race: Comparison to National Statistics

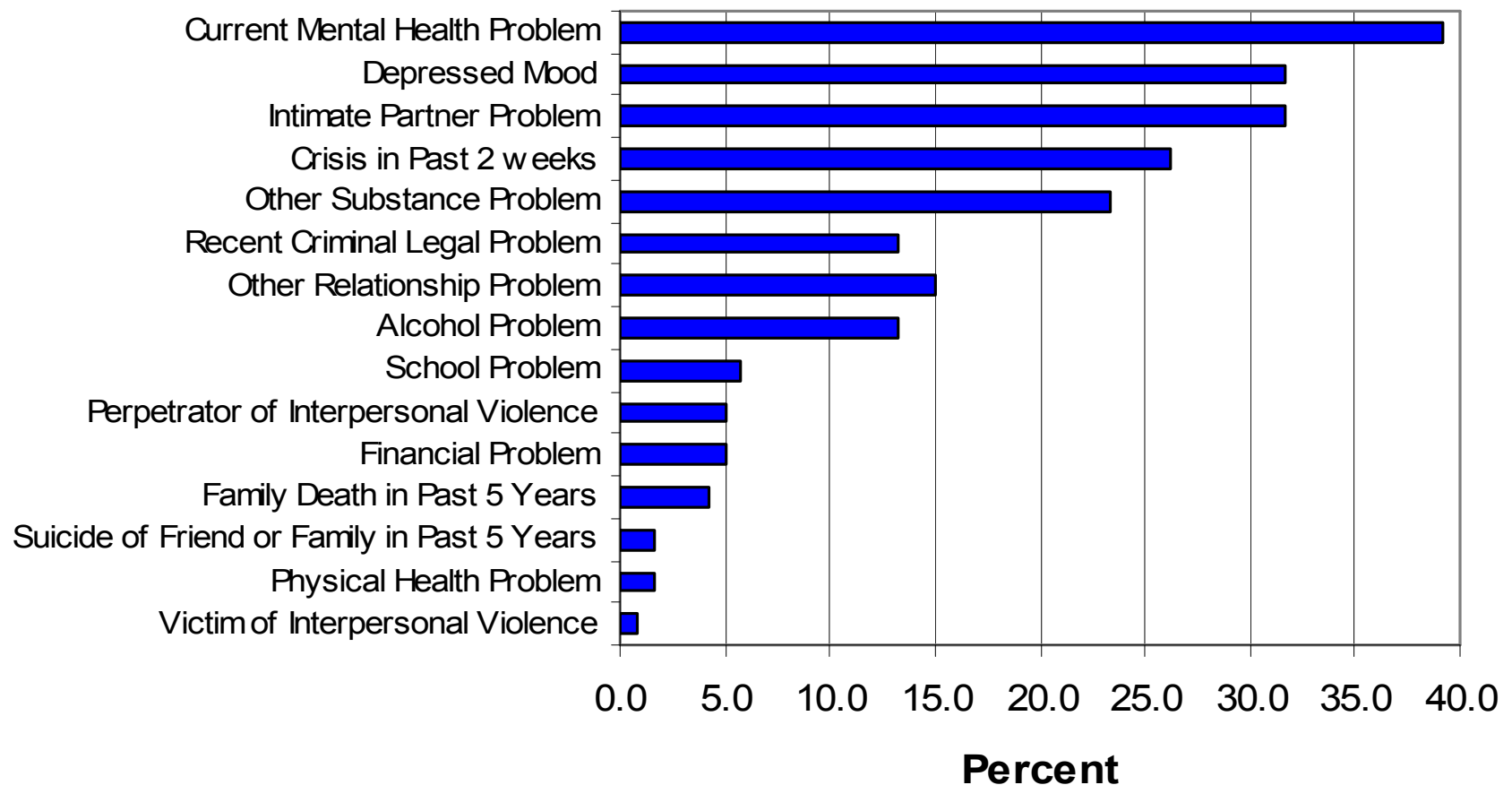


Suicide Rate by County, 12-24 years, Maryland 2003-2004

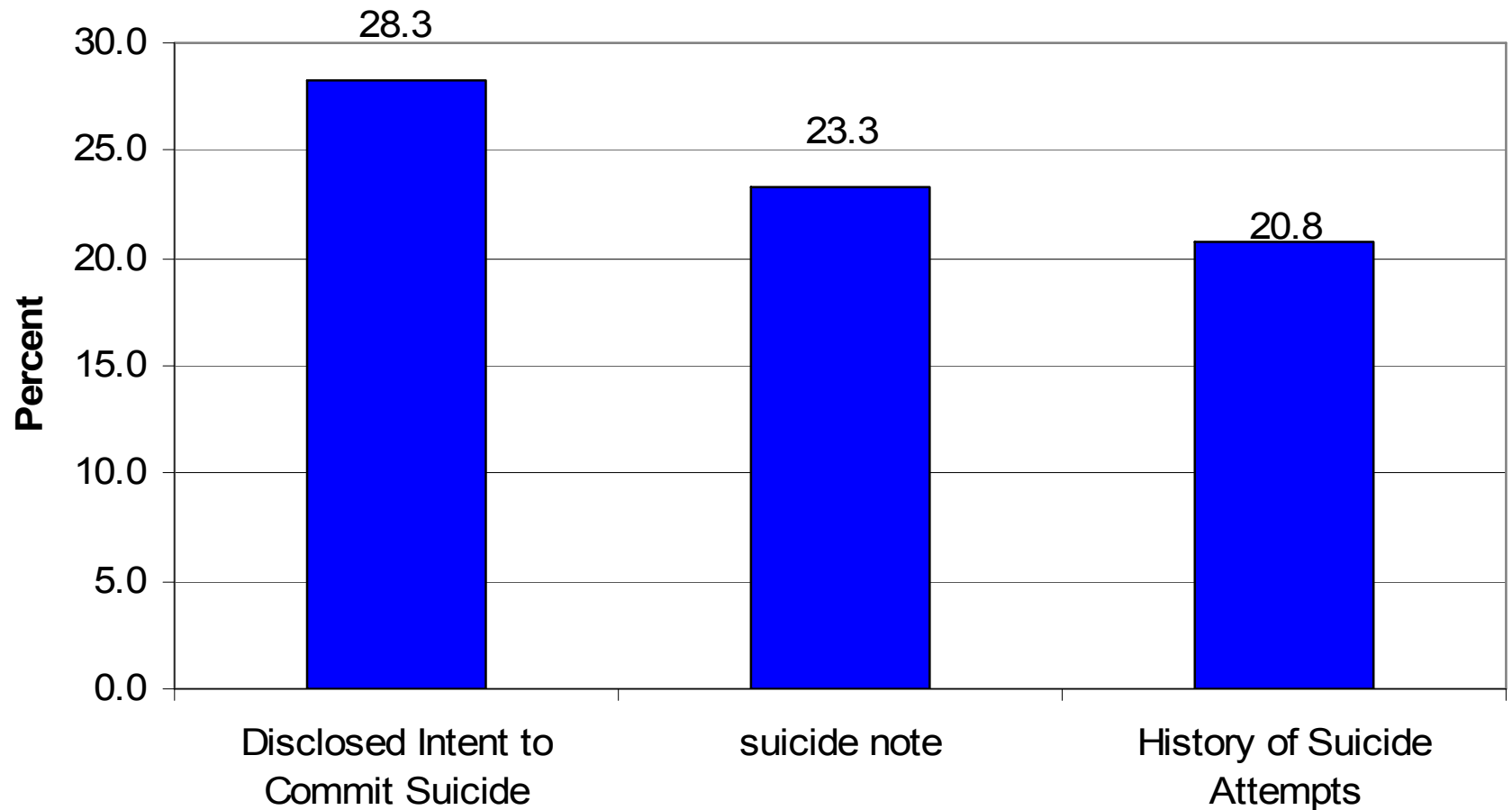


Note: Rates are shown for only the counties with 5 or more suicides. Other counties with suicides during these years and the indicated number include: Cecil (4), Charles (4), Washington (3), Queen Anne's (2), and St. Mary's (1).

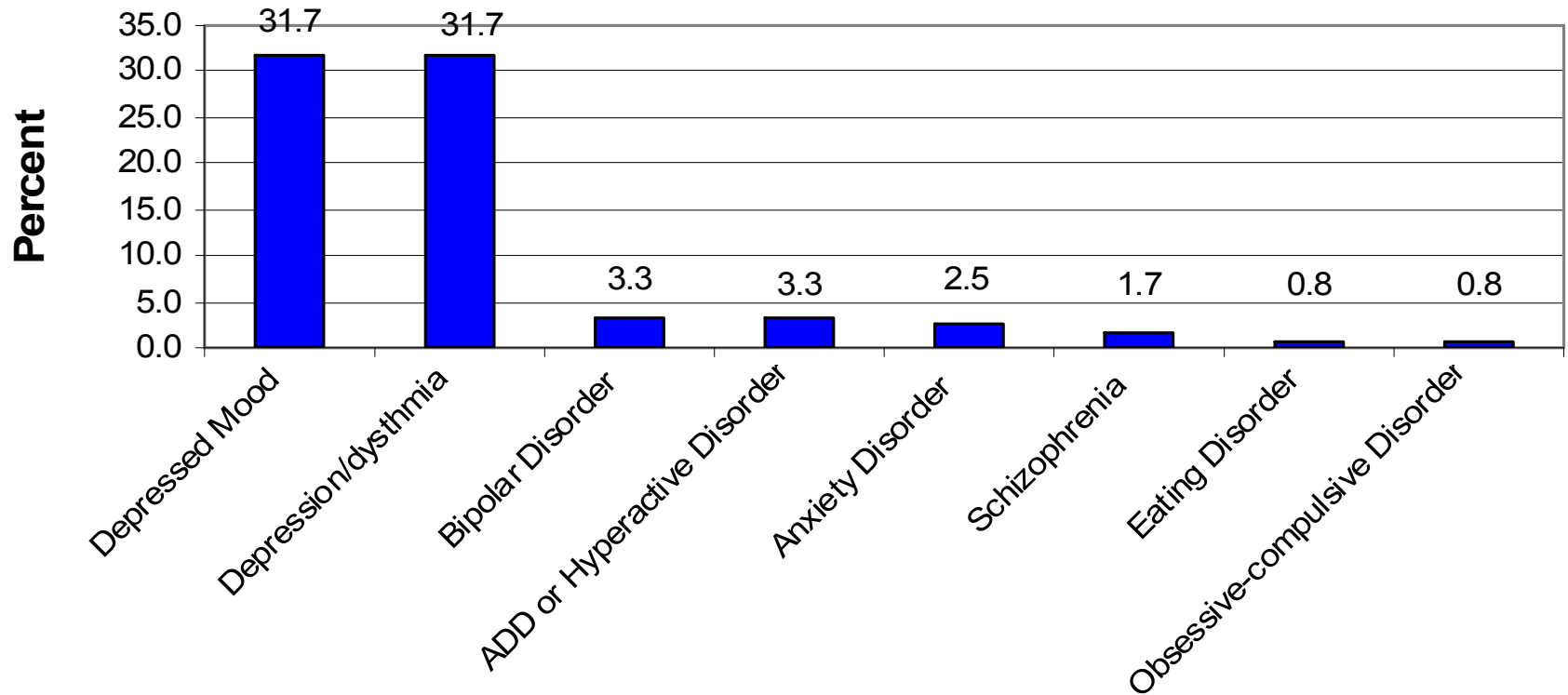
Selected Characteristics of Suicide Victims, 12-24 years, Maryland, 2003-2004



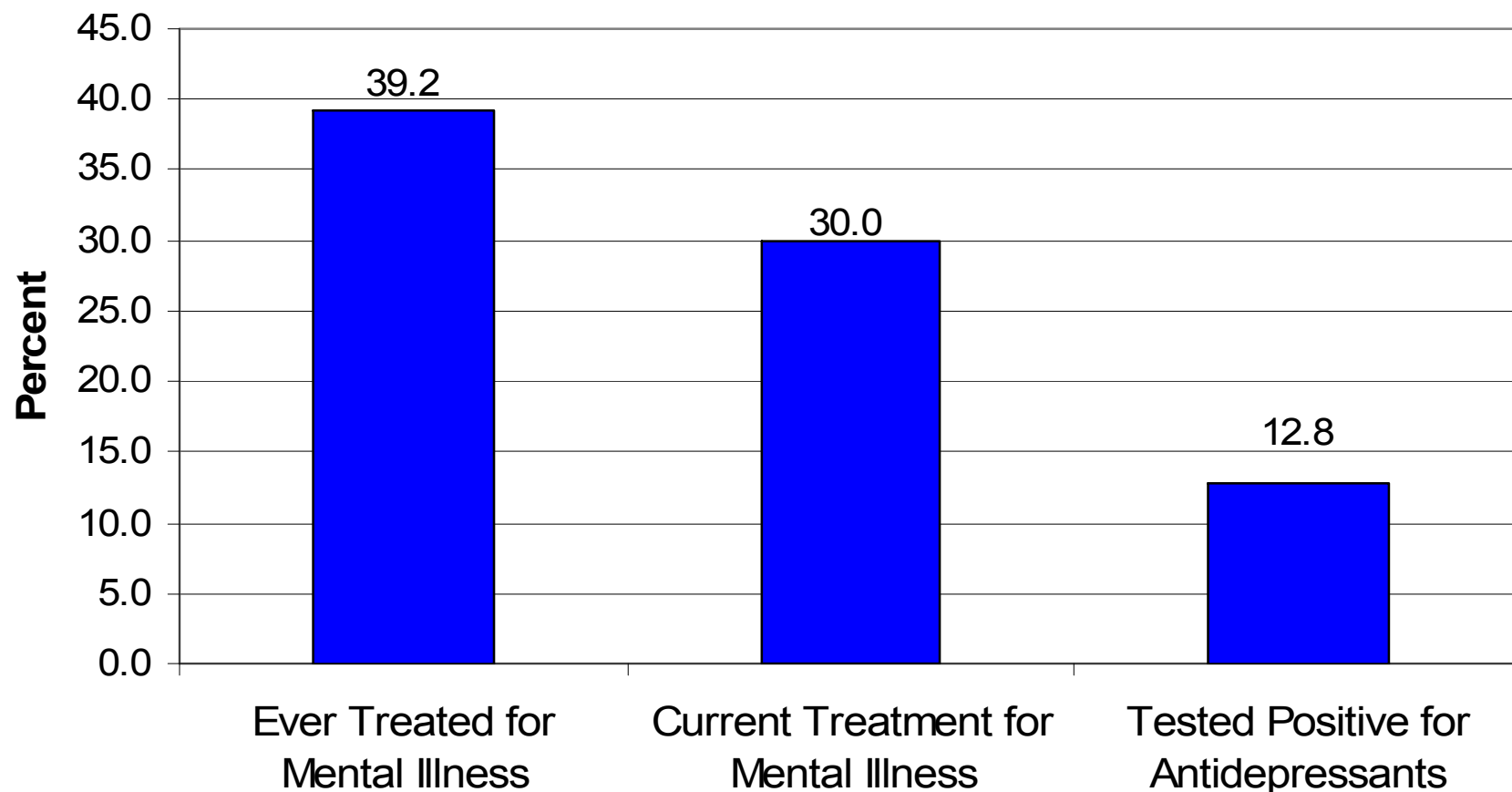
Suicide Intent and History of Prior Suicide Attempts, 12-24 years, Maryland, 2003-2004



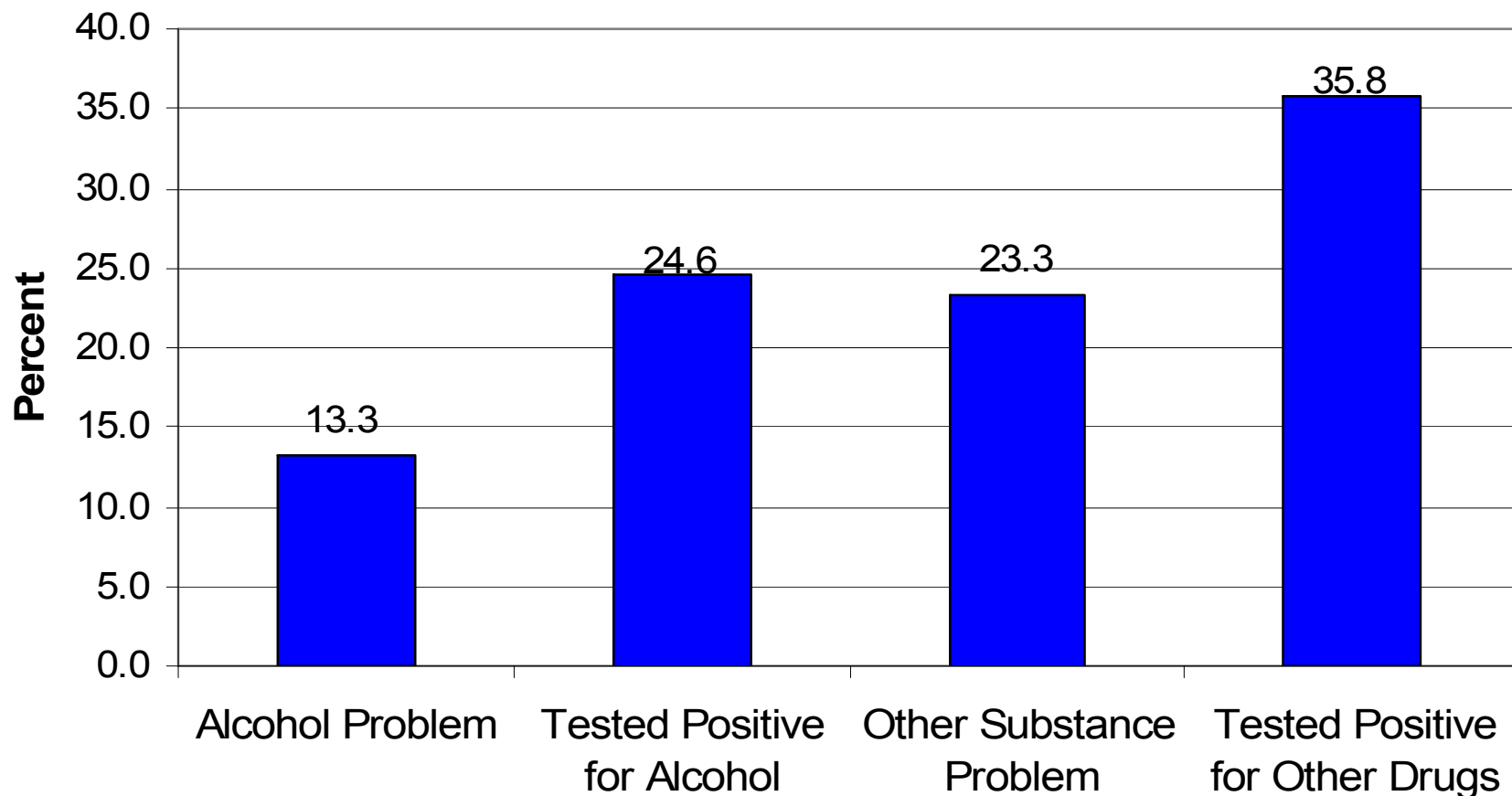
Mental Health and Mood Problems Among Suicide Victims, 12-24 years, Maryland, 2003-2004



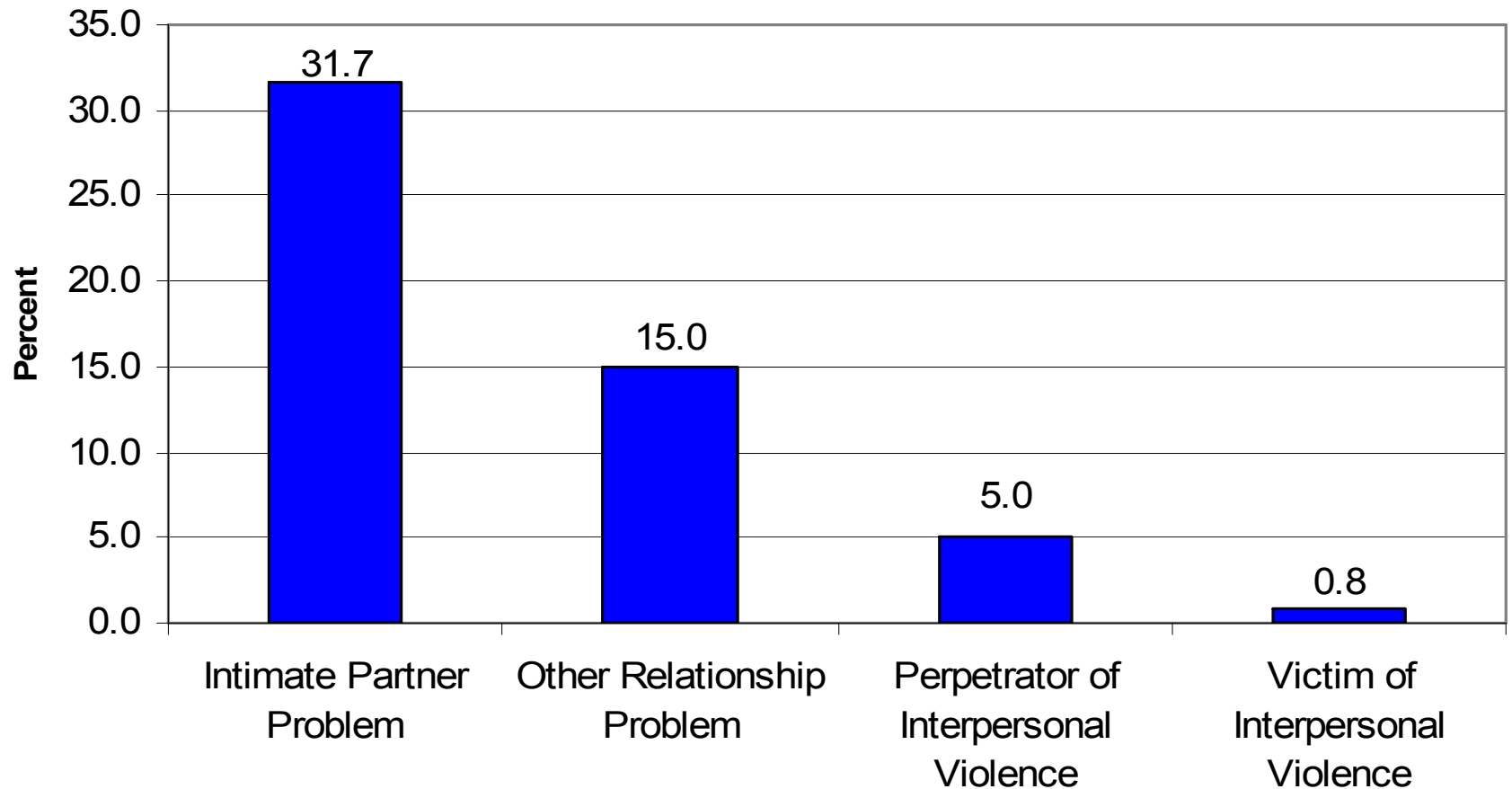
Treatment for Mental Health Problems, 12-24 years, Maryland, 2003-2004



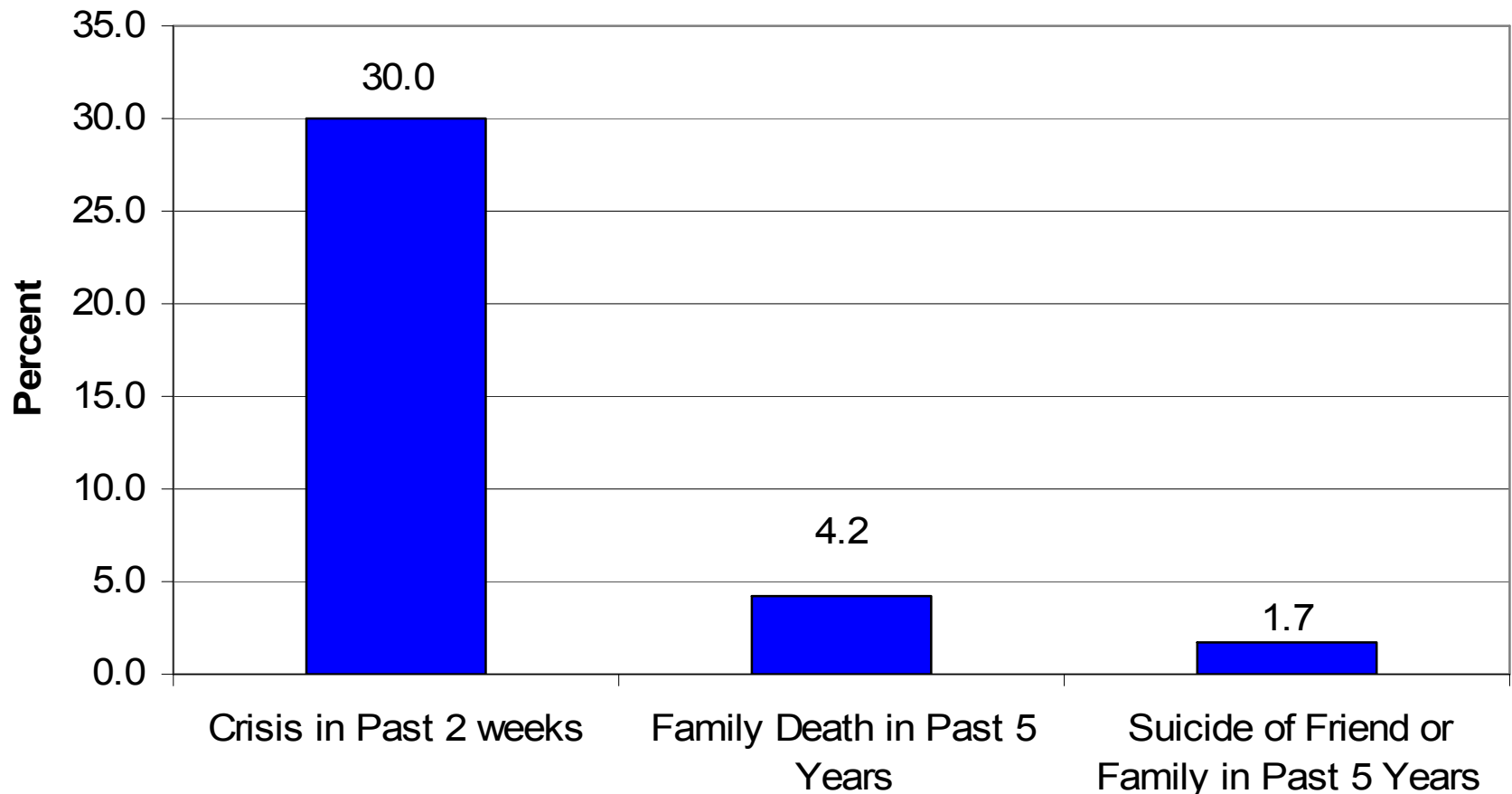
Substance Use and Abuse Among Suicide Victims, 12-24 years, Maryland, 2003-2004



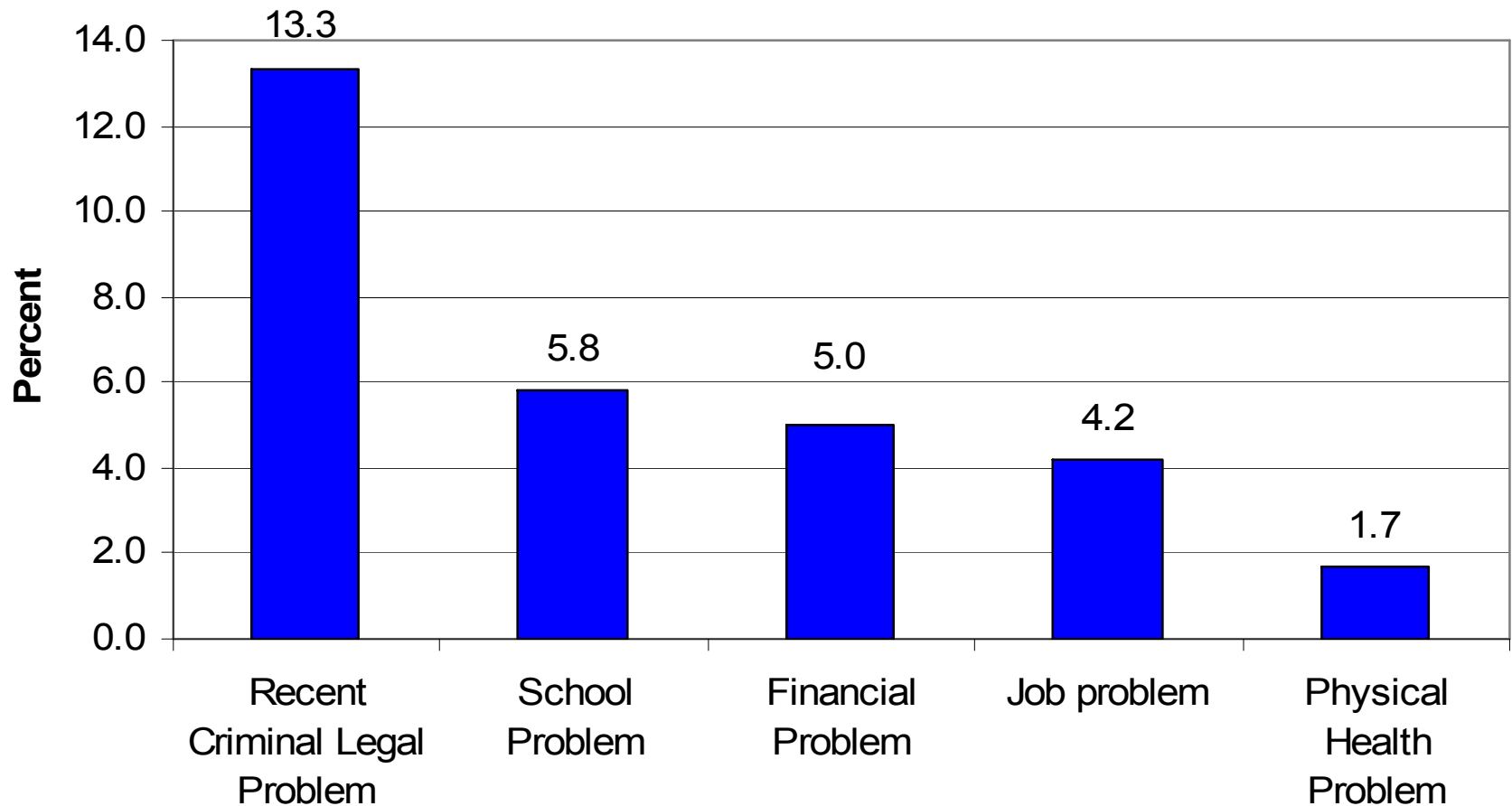
Relationship and Interpersonal Problems Among Suicide Victims, 12-24 years, Maryland, 2003-2004



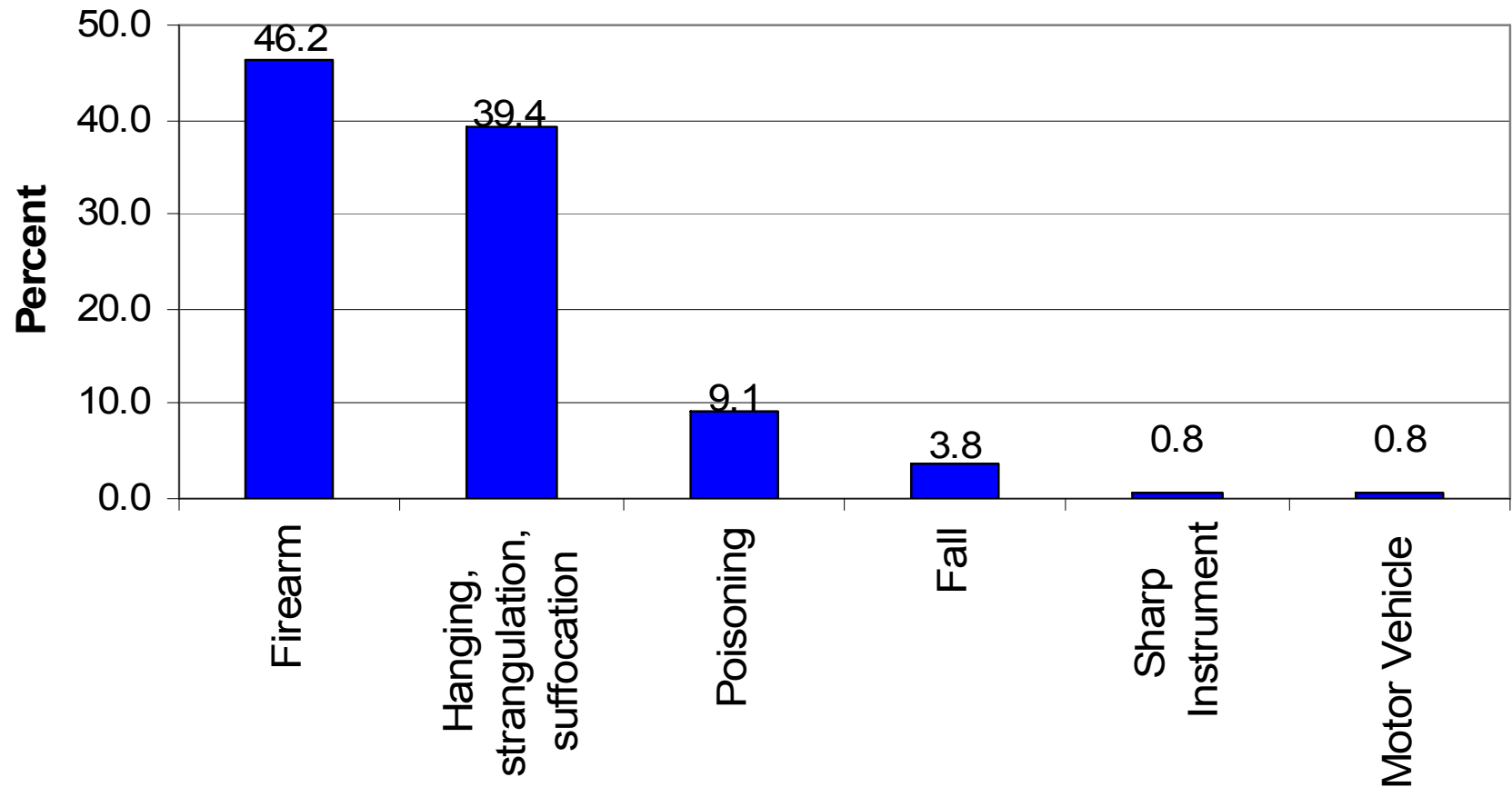
Traumatic Life Events Among Suicide Victims, 12-24 years, Maryland, 2003-2004



Other Problems among Suicide Victims, 12-24 years, Maryland, 2003-2004



Methods of Suicide, 12-24 years, Maryland, 2003-2004



Significant Associations by Gender

| | | Proportion % (N) | P-Value | Difference in Proportions † (%) |
|---|--------|---------------------|---------|---------------------------------|
| Suicide Note | Gender | | | |
| | Female | 55.00 (11) | 0.0002 | 38.00 (14.99, 61.01) |
| | Male | 17.00 (17) | | |
| History of Suicide Attempts | Gender | | | |
| | Female | 40.00 (8) | 0.021 | 23.00 (0.3, 45.7) |
| | Male | 17.00 (17) | | |
| Firearm | Gender | | | |
| | Female | 4.76 (1) | 0.0000* | -49.29 (-62.29, -36.30) |
| | Male | 54.05 (60) | | |
| Hanging, Strangulation, Suffocation | Gender | | | |
| | Female | 61.90 (13) | 0.021 | 26.77 (4.18, 49.36) |
| | Male | 35.14 (39) | | |

*Fisher's exact used where observed cell count < 5 and expected cell count > 5

† By normal approximation

Significant Associations by Age

| | | Proportion % (N) | P-Value | Difference in Proportions † (%) |
|--|-------|---------------------|---------|---------------------------------|
| Alcohol Problem | Age | | | |
| | 20-24 | 18.92 (14) | 0.027 * | 14.57 (3.88, 25.27) |
| | 12-19 | 4.35 (2) | | |
| Tested Positive for Alcohol | Age | | | |
| | 20-24 | 37.70 (23) | 0.0003* | 29.54 (15.16, 43.92) |
| | 12-19 | 8.16 (4) | | |

*Fisher's exact used where observed cell count < 5 and expected cell count > 5

† By normal approximation

Significant Relationships by Residence

| | | Proportion % (N) | P-Value | Difference in Proportions †(%) |
|------------------------------------|--------|---------------------|---------|--------------------------------|
| Alcohol Problem | County | | | |
| | Rural | 25.93 (7) | 0.033 | 16.04 (-33.67, 1.60) |
| | Urban | 9.89 (9) | | |
| Other Substance Problem | County | | | |
| | Rural | 40.74 (11) | 0.008 | 24.26 (4.22, 44.30) |
| | Urban | 16.48 (15) | | |
| Tested Positive for Alcohol | County | | | |
| | Rural | 42.31 (11) | 0.019 | 22.80 (1.96, 43.63) |
| | Urban | 19.51 (16) | | |

† By normal approximation

Conclusion

- Describing the problem, understanding the risk factors, and protective factors are essential in effective preventive efforts.
- Promote overall mental health among children by reducing early risk factors for depression, substance abuse, and aggressive behaviors and building resiliency.
- Detect youth most likely to be at risk through screening for depression, substance abuse, and suicide ideation and refer them for treatment.
- Limit young people's access to lethal weapons (e.g., guns and medications).
- Use caution in media and school-based suicide education programs so as not to normalize or glamorize suicide.

Acknowledgements

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*Center for Maternal and Child Health, DHMH

**Center for Preventive Health Services, DHMH